

WHAT IS CLAIMED IS:

1. A spool support structure for a spinning reel adapted to mount a spool rotatably on a spool shaft that is movable forward and backward with respect to a reel unit,
5 said spool support structure comprising:

at least one bearing being disposed on an inner peripheral portion of the spool;

an annular member being mounted to an outer periphery of the spool shaft so as to be prevented from moving rearward relative to the spool shaft;

a tubular retaining member being configured to receive a rearward force from the
10 spool, said tubular retaining member having,

an outer periphery being configured to retain said bearing,

an inner periphery adapted to be non-rotatably mounted to the spool shaft,

and

a rear end portion contacting said annular member; and

15 a nut member being mounted to an outer periphery of the spool shaft, such that said retaining member is interposed and fixedly held between said annular member and said nut member.

2. The spool support structure according to claim 1, wherein

20 said retaining member includes a cylindrical portion whose inner periphery is adapted to be non-rotatably mounted to the spool shaft, and a disk portion that is arranged on an outer periphery of said cylindrical portion, a front side surface of said disk portion being adapted to receive rearward force from the spool.

3. The spool support structure according to claim 2, wherein
said cylindrical portion includes a first cylindrical portion that is provided on a
front side of said disk portion, and a second cylindrical portion that is provided on a rear
side of said disk portion, and

5 said at least one bearing includes a first bearing that is disposed on an outer
periphery of said first cylindrical portion, and a second bearing that is disposed on an outer
periphery of said second cylindrical portion.

4. The spool support structure according to claim 2, further comprising
10 spacer members mounted on said retaining member such that said spacer members
are adapted to be mounted between said front side surface of said disk portion and the
inner peripheral portion of the spool.

5. The spool support structure according to claim 1, wherein
15 said retaining member is adapted to be non-rotatably mounted to the spool shaft by
a pin member that is inserted into through holes formed in said cylindrical portion and the
spool shaft.

6. The spool support structure according to claim 1, wherein
20 a first threaded portion is formed on an inner periphery of said nut member, and
a second threaded portion is formed on an outer periphery of the spool shaft, the
second threaded portion being adapted to engage with said first threaded portion of said
nut member.溝

7. The spool support structure according to claim 1, further comprising
a washer adapted to be mounted on the spool shaft between said nut member and
said front end portion of said retaining member.

5 8. The spool support structure according to claim 3, wherein
an outer diameter of said nut member is smaller than an inner diameter of said first
bearing.

9. The spool support structure according to claim 5, wherein
10 said pin member is an Allen set-screw.

10. The spool support structure according to claim 3, wherein
said annular member is in contact with a rear end of said second bearing.

15 11. A spinning reel comprising:

a reel unit;

a handle being rotatably supported by said reel unit;

a rotor being rotatably on a front of said reel unit;

a spool being disposed on a front of said rotor, said spool being movable forward

20 and backward relative to said reel unit; and

a spool support structure mounting said spool rotatably on a spool shaft that is
movable forward and backward with respect to said reel unit, said spool support structure
including

at least one bearing being disposed on an inner peripheral portion of said
spool,

an annular member being mounted to an outer periphery of said spool shaft
so as to be prevented from moving rearward relative to said spool
shaft,

a tubular retaining member being configured to receive a rearward force
from said spool, said tubular retaining member having
an outer periphery being configured to retain said bearing,
an inner periphery non-rotatably mounted to said spool shaft, and
a rear end portion contacting said annular member, and
a nut member being mounted to an outer periphery of said spool shaft, such
that said retaining member is interposed and fixedly held between
said annular member and said nut member.

12. The spinning reel according to claim 11, wherein
said retaining member includes a cylindrical portion whose inner periphery is non-
rotatably mounted to said spool shaft, and a disk portion that is arranged on an outer
periphery of said cylindrical portion, a front side surface of said disk portion being
configured to receive rearward force from said inner peripheral portion of said spool.

13. The spinning reel according to claim 12, wherein
said cylindrical portion includes a first cylindrical portion that is provided on a
front side of said disk portion, and a second cylindrical portion that is provided on a rear
side of said disk portion, and

said at least one bearing includes a first bearing that is disposed on an outer periphery of said first cylindrical portion, and a second bearing that is disposed on an outer periphery of said second cylindrical portion.

5 14. The spinning reel according to claim 12, further comprising
spacer members mounted on said retaining member such that said spacer members
are mounted between said front side surface of said disk portion and said inner peripheral
portion of said spool.

10 15. The spinning reel according to claim 11, wherein
said retaining member is non-rotatably mounted to said spool shaft by a pin
member that is inserted into through holes formed in said cylindrical portion and said
spool shaft.

15 16. The spinning reel according to claim 11, wherein
a first threaded portion is formed on an inner periphery of said nut member, and
a second threaded portion is formed on an outer periphery of said spool shaft, said
second threaded portion engaging with said first threaded portion of said nut member.

20 17. The spinning reel according to claim 11, further comprising
a washer mounted on said spool shaft between said nut member and said front end
portion of said retaining member.

18. The spinning reel according to claim 13, wherein

an outer diameter of said nut member is smaller than an inner diameter of said first bearing.

5 19. The spinning reel according to claim 11, wherein
said pin member is an Allen set-screw.

20. The spinning reel according to claim 13, wherein
said annular member is in contact with a rear end of said second bearing.